

ABSTRACT

The present invention relates to a liquid crystal display, which comprises: a lower substrate having a reflective electrode; a lower alignment film formed on the lower substrate; an upper substrate having a color filter and disposed opposite to the lower substrate; an upper alignment film formed on the upper substrate; a liquid crystal layer sandwiched between the lower and upper substrates; a phase compensation film adhered on the outer surface of the upper substrate and serving to convert linearly polarized light into circularly polarized light; and a polarizer adhered on the phase compensation film and serving to convert natural light into linearly polarized light. The lower alignment film has an alignment angle of -10 to 20° with respect to a horizontal line, the upper alignment film has an alignment angle of 40 to 55° with respect to a horizontal line, the liquid crystal layer has a phase delay value ($d\Delta n$) of 0.24-0.27 μm , the phase compensation film has a phase compensation function of $\lambda/4$ and also has an optical axis making 140-146° with a horizontal line, and the polarizer has a absorption axis making 120 to 122.5° with a horizontal line. According to the present invention, the design of a liquid crystal cell

can be optimized to provide a liquid crystal display having excellent display characteristics. Furthermore, cell gap can be increased to improve process margin.